## New Jersey's Four-Tiered Approach to Volunteer Monitoring

Tier	Data Users	Data Use	<b>Quality Needed</b>
A. Environmental Education	<ul><li>Participants</li><li>Students</li></ul>	<ul> <li>Promote stewardship</li> <li>Educational purposes</li> <li>Raise their level of understanding of watershed ecology</li> </ul>	<ul> <li>Low level of rigor but use sound science</li> <li>Wide variety of study designs are acceptable</li> <li>Quality assurance recommended for educational purposes</li> </ul>
B. Stewardship	<ul> <li>Participants</li> <li>Watershed residents</li> <li>Local decision makers</li> </ul>	<ul> <li>Gain understanding of existing conditions and changes over time</li> <li>Screen for and identify problems and positive attributes</li> </ul>	<ul> <li>Low/medium level of rigor</li> <li>Variety of study designs are acceptable</li> <li>Internal quality assurance desirable</li> <li>Training required</li> </ul>
C. Community/ Watershed Assessment	<ul> <li>Participants</li> <li>Local decision makers</li> <li>Watershed associations</li> <li>Environmental Organizations</li> <li>Possibly DEP</li> </ul>	<ul> <li>Assess current conditions</li> <li>Track trends</li> <li>Source track down of nonpoint source pollution</li> </ul>	<ul> <li>Medium level of rigor</li> <li>Data needs to reliably detect changes over time and space</li> <li>Narrower range of protocols acceptable</li> <li>Internal and external quality assurance</li> <li>QAPP annually reviewed</li> <li>Training and annually "refresher" training recommended</li> </ul>
D. Indicators	<ul> <li>Participants</li> <li>State decision makers, DEP</li> <li>Local decision makers</li> <li>Watershed associations</li> <li>Environmental Organizations</li> </ul>	<ul> <li>Assess current conditions and impairments</li> <li>Supplement agency data collection</li> <li>Research</li> <li>Evaluate best management practices</li> </ul>	<ul> <li>High level of rigor</li> <li>Study designs and methods need to be equivalent and recognized by agencies using the data</li> <li>Training and annual "refresher" training required</li> <li>QAPP required</li> <li>Annual approval of QAPP required</li> <li>Audit by program manager and potential data users</li> </ul>